



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/600,678

06/19/2003

Christian Schurle

(WW) 27737 PUS

6744

7590

08/30/2004

M. Robert Kestenbaum
11011 Bermuda Dunes NE
Albuquerque, NM 87111

EXAMINER

FORD, JOHN K

ART UNIT

PAPER NUMBER

3753

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,678

Applicant(s)

SCHURLE ET AL.

Examiner

John K. Ford

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35-9 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/28/03 + 4/22/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Art Unit: 3753

Applicant has submitted at least three prior art references (DE '942, DE '834 and DE '501) that have apparently been used to critique claims in the German Patent office. If translations of these references are unavailable, could applicant at least translate the gist of the examiner's remarks in regard to the aforementioned references as found on page 2 of the German Search Report.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 should positively the location of the "fluid outlet" by deletion of the words "to be positioned".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3753

Claims 1-3, 6 and (are 8) rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over DE 19650942.

It appears from the German Search Report that a support arrangement 9 is shown fixed to a vehicle and has a fan 3, first heat exchanger 13 and a combustion heater 8. While not disclosed, the heater 8 inherently has a heat exchanger inside of it to prevent discharge of combustion products into the vehicle. Regarding claim 2, the unit 9 appears to be arranged on the firewall (6?), and substantially closes the hole with the rotary valve shown at 12^f, it would appear. Regarding claim 6, it is known that coolers such as 13 are connected to compressors, which constitute "a drive unit".

Claims 1-3, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE '942 as applied to claims 1-3, 6 and 8 above, and further in view of Okura et al (USP 4,749,028).

Okura discloses a conventional air conditioning system (see description of element 6) includes a compressor, as believed to be inherent in DE '942, as well as a heat exchanger 20 in a combustion heater (again believed to be inherent in DE'942).

To have used conventional refrigeration components connected to heat exchanger 13 of DE '942 and conventional combustion heater heat exchange in unit 8 of DE '942 would have been obvious to one of ordinary skill in the art as taught by Okura.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3753

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 4014501.

DE '501 cited by applicant, without translation, shows a support (casing) in Figure 1, a fan 11, first heat exchanger 2, heating device 7, second heat exchanger 3, The heating device 7 and second heat exchanger 3 are supported in the casing in Figure 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Shirota (6044656), Figure 6, and Quass (5413279).

Shirota in Fig 5 shows heater core 22 (first heat exchanger) fixed in a casing (shown in exploded view in fig 5). The casing is shown in figure 6 with pipes 22a extending through the firewall into the engine compartment. No combustion heater is shown.

Quass teaches a series connected combustion heater and liquid to air heat exchange in Figs 1-3 and states that it is intended to be a substitute for a conventional heater core (Quass col. 3, lines 3-7), such as shown by Shirota.

Art Unit: 3753

To have made the substitution explicitly suggested by Quass into Shirota (in place of Shirota's core 22) to obtain advantageous quick heating of passenger compartment and engine would have been obvious.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Takagi (6076593) and Quass (5413279).

Takagi shows a combustion burner 76 with a second heat exchanger (Fig. 2 element 86) located upstream of a first heat exchanger 34. First heat exchanger 34 is located and supported in support arrangement duct 14, which has a fan 30 upstream of it. The heating device 76 and heat exchanger 34 are not commonly supported on the duct 14.

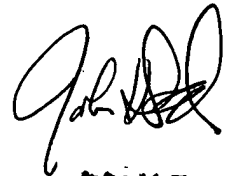
Quass Figs. 1-3 teaches an integrated heater core 4 and combination burner 6 that are suitable for ^{mounting} ~~mounting~~ in place of a conventional heater core. See col. 3, lines 3-7.

To have used Quass' combined heater core/combustion heater in ~~the~~ Takagi's casing in place of elements 76 and 34 to advantageously preheat the engine when using internal combustion engine source would have been obvious.

Art Unit: 3753

Claim 4 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and to address the 35 USC. 112 problem noted above.

Any inquiry concerning this communication should be directed to John Ford at telephone number ⁷⁰³308-2636.
^



John K. Ford
Primary Examiner